

# CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Tropical AgriSciences

## Evaluation of the Diploma Thesis by Opponent

Thesis Title **Proposal of proper technologies for purification of domestic and drinking water from river Sanaga for Yaounde city, Cameroon.**

Name of the student **BSc. George Besong Beteck**

Thesis supervisor **doc. Ing. Vladimír Krepl, CSc.**

Department **Department of Sustainable Technologies**

Opponent **prof. Ing. Jan Vymazal, CSc.**

Formulation of the aims	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Appropriate research methods	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input type="checkbox"/> 4
Fulfilment of the aims	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
The scientific contribution of the thesis and originality	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input type="checkbox"/> 4
The theoretical background of the author (literature review, theoretical background)	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Data analysis	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input type="checkbox"/> 4
Handling with scientific literature (relevant citations)	<input checked="" type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Argumentation and critical thinking	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Abstract and keywords	<input checked="" type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Structure of the chapters and paragraphs	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Accuracy of terminology and comprehensibility	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input type="checkbox"/> 4
Formatting, layout and general impression	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input type="checkbox"/> 4
Evaluation of the work by grade (1, 2, 3, 4)				<b>3</b>

Evaluation: 1 = the best

Date 14/05/2023

*el. signed by* prof. Ing. Jan Vymazal, CSc. on 14/05/2023 22:20

Signature of Opponent

**Other comments or suggestions:**

The thesis deals with methods used to provide drinking and domestic waters in Yaounde, Cameroon. It is difficult to say whether the thesis is a review or experimental work but majority of the work is aimed at the review of potentially available technologies for water purification and water supply in Cameroon. The experimental part is very short and does not provide sufficient background to make any recommendations. In addition, it is a bit unusual to present the aims of the thesis on page 50.

**Comments:**

Literature review is a bit lengthy and contains superfluous information which has nothing to do with situation of water supply in Cameroon.

The selection of literature sources is very good but the individual references in the list are incomplete as none of them includes pagination.

In the text, there are many inaccuracies:

- page 8: BOD is biochemical oxygen demand, not biological oxygen demand (also page 17)
- throughout the thesis: The word "waste" is used most commonly for solid materials as compared to wastewaters; in my opinion quite often the word wastes is used instead of wastewaters (such as in section 2.2.1.6.)
- page 16: carbon trace market is not a part of water pollution
- Table 2 (and further text): the unit for total coliforms should be CFU per volume of water (usually 100 ml)

Figures, Charts, Graphs and Tables are mostly not mentioned in the text and appear in the text "out of blue".

Some of the figures/charts are difficult to read and the captions do not explain terms occurring in the figures/charts/graphs. For example, in Figure 36 there is no explanation what given volumes mean. Also, in Table 2, the abbreviations are not explained.

The division of the text to sections up to seven levels is too much

SWOT analysis (Table 3) should be part of the discussion as it is not a part of the experimental work.

**Questions for thesis defence:**

In many charts dealing with sanitation situation, there is a category "unimproved". What does it mean?

On page 13, you use term "littoral region". Can you explain what littoral zone means in ecology?

How often is reverse osmosis used in households in Cameroon? In general, how often are methods described in section 2.8.2. used in Cameroon households? What is the most common technology to purify the water in the households?

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